AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) An image display apparatus comprising:

a display region having a plurality of pixels, each pixel comprising

a current-controlled light emitting element that emits light with a brightness corresponding to a current flowing in the current-controlled light emitting element,

a driver element that includes at least first and second terminals and controls the current flowing into the electric light emitting element based on a potential difference applied between the terminals, and

a data line that supplies a potential to the first terminal, and a conductive member that is electrically connected to the second terminal; and

a threshold voltage obtaining unit that ~~is arranged outside the display region and~~ obtains a threshold voltage of the driver element based on the potential of the conductive member corresponding to an amount of charges supplied from the current source to the second terminal.

2. (Previously Presented) The image display apparatus according to claim 1, wherein

the driver element becomes on-state by applying a potential higher than an estimated threshold voltage, between the first terminal and the second terminal upon starting to obtain the threshold voltage, and

the conductive member whose potential changes by accumulating charges supplied from the current source through the driver element and the current-controlled light emitting element so that the potential difference between the first and second terminals of the driver element shifts to the threshold voltage.

3. (Original) The image display apparatus according to claim 1, wherein

the driver element becomes off-state caused by rising of the potential of the conductive member up to a predetermined potential after the driver element becomes on-state, and

the threshold voltage obtaining unit obtains a threshold voltage based on the potential of the conductive member after the driver element becomes off-state.

4. (Original) The image display apparatus according to claim 1, wherein

the threshold voltage obtaining unit obtains a threshold voltage based on potentials of the conductive member at two or more different times after the driver element becomes on-state and before the driver element becomes off-state caused by rising of the potential of the conductive member up to a predetermined potential.

5. (Previously Presented) The image display apparatus according to claim 4, wherein

the threshold voltage obtaining unit obtains a threshold voltage using a total sum of a capacitance of the second terminal and a capacitance of a capacitor electrically connected to the conductive member and a potential applied to the first terminal, as parameters.

6. (Original) The image display apparatus according to claim 4, wherein

the threshold voltage obtaining unit obtains the threshold voltage, and obtains a mobility in a current passage portion of the driver element and a coefficient according to a shape of the current passage portion.

7. (Original) The image display apparatus according to claim 1, further comprising:

a database in which potentials of the conductive member and threshold voltages of the driver element are associated with each other, wherein the threshold voltage obtaining unit obtains a threshold voltage by referring to the database based on the potentials of the conductive member at one or more times after the driver element becomes on-state.

8. (Original) The image display apparatus according to claim 1, wherein a potential is supplied to the first terminal upon displaying an image so that a voltage between the first terminal and the second terminal becomes a sum of the threshold voltage obtained by the threshold voltage obtaining unit and a data voltage corresponding to a display image.

9. (Previously Presented) The image display apparatus according to claim 6, wherein

the data line supplies a potential to the first terminal so that a voltage between the first terminal and the second terminal becomes a potential obtained by multiplying a sum of the threshold voltage obtained by the threshold voltage obtaining unit and a data voltage corresponding to a display image, by a value determined based on the mobility in the current passage portion of the driver element and the coefficient according to the shape of the current passage portion.

10. (Original) The image display apparatus according to claim 1, further comprising:

a constant potential supply unit that supplies a substantially constant potential upon displaying an image; and

a switching unit that establishes a connection between the constant potential supply unit and the conductive member upon displaying the image, and isolates the constant potential supply unit from the conductive member upon obtaining the threshold voltage.

11. (Previously Presented) The image display apparatus according to claim 1, wherein

the driver element is a thin film transistor, which includes a gate electrode, a source electrode, and a drain electrode,

the first terminal corresponds to the gate electrode, and the second terminal corresponds to the source electrode.

12. (Previously Presented) The image display apparatus according to claim 1, wherein the current-controlled light emitting element is an organic electro-luminescence element.

13. (Previously Presented) An image display apparatus comprising:

a plurality of pixels, each pixel comprising

a current-controlled light emitting element that emits light with a brightness corresponding to a current flowing in the current-controlled light emitting element,

a driver element that includes at least first and second terminals and controls the current flowing into the electric light emitting element based on a potential difference applied between the terminals, and

a data line that supplies a potential to the first terminal, and a conductive member that is electrically connected to the second terminal; and

a threshold voltage obtaining unit that calculates a threshold voltage of the driver element based on the potential of the conductive member corresponding to an amount of charges supplied from a current source to the second terminal.

14. (New) A driving method comprising:

providing an image display apparatus that includes a plurality of pixels, each pixel including a current controlled light emitting element and a driver element driving the current-controlled light emitting element, and a conductive member that is electrically and commonly connected to the plural driver elements; and

measuring a potential variation of the conductive member to obtain threshold voltages of the driver elements electrically connected to the conductive member.

15. (New) The driving method according to claim 14, wherein the potential variation of the conductive member occurs due to a cause including one of a current flowing to the conductive member and a current flowing from the conductive member through the driver elements.